

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/757,118	01/14/2004	Lee Anthony Smith	2967		
7590 11/18/2004			EXAMINER		
Lee A. Smith 1014 Barnett Drive Pensacola, FL 32505			SHECHTMAN, SEAN P		
			ART UNIT	PAPER NUMBER	
			2125		

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Applica	ition No.	Applicant(s)				
Office Action Summary		,118	SMITH ET AL.				
		ier	Art Unit				
	Sean P	. Shechtman	2125				
The MAILING DATE of this commu Period for Reply	nication appears on	the cover sheet with the c	orrespondence ad	ldress			
A SHORTENED STATUTORY PERIOD THE MAILING DATE OF THIS COMMUI - Extensions of time may be available under the provision after SIX (6) MONTHS from the mailing date of this con- If the period for reply specified above is less than thirty If NO period for reply is specified above, the maximum - Failure to reply within the set or extended period for rep Any reply received by the Office later than three months earned patent term adjustment. See 37 CFR 1.704(b).	NICATION. as of 37 CFR 1.136(a). In no munication. (30) days, a reply within the statutory period will apply an ly will, by statute, cause the	event, however, may a reply be tin statutory minimum of thirty (30) day I will expire SIX (6) MONTHS from application to become ABANDONE	nely filed s will be considered timel the mailing date of this c D (35 U.S.C. § 133).	y. ommunication.			
Status .							
1) Responsive to communication(s) fi	led on <u>23 <i>June 200</i>4</u>						
2a) This action is FINAL .	2b)⊠ This action is	s non-final.					
3) Since this application is in condition	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the prac	tice under Ex parte	Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims							
4) ☐ Claim(s) 1-27 is/are pending in the 4a) Of the above claim(s) is/5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-27 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restr	are withdrawn from						
Application Papers							
9)⊠ The specification is objected to by to 10)⊠ The drawing(s) filed on 14 January Applicant may not request that any objected that any objected the control of the contr	2004 is/are: a) ☐ a ection to the drawing(sing the correction is req	s) be held in abeyance. Security by the security of the drawing(s) is ob-	e 37 CFR 1.85(a). jected to. See 37 C	FR 1.121(d).			
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a clair a) All b) Some * c) None of: 1. Certified copies of the priorit 2. Certified copies of the priorit 3. Copies of the certified copie application from the Internat * See the attached detailed Office act	y documents have by documents have be s of the priority docu ional Bureau (PCT F	een received. een received in Applicati ments have been receive Rule 17.2(a)).	ion No ed in this National	Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review 3) Information Disclosure Statement(s) (PTO-1449 Paper No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate	O-152)			

DETAILED ACTION

1. Claims 1-27 are presented for examination.

2. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed.

Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

Applicant is advised of the availability of the publication "Attorneys and Agents Registered to Practice Before the U.S. Patent and Trademark Office." This publication is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Priority

3. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. However, the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claims 1-27 of this application. The provisional application fails to provide for, among other things, a plurality of electrically actuated solenoid valves (claim 1), a thermal sensor (claim 1), a thermal sensor for delivering signals related to current temperature of water in hot water heater inline with said piping system (claim 1), an electric relay to supply or remove a water heater with supply current (claim 1), a bi-positional valve that requires independent signals to place it in either the open or closed states (claim 1), water usage counting (claim 1), irrigation/sprinkler systems (claim 1), a device which provides for reduced

toxic mold development (claim 1), pressure anomalies which trigger a counting of water until a user programmed amount in gallons has been reached (claim 1), pressure anomaly/anomalies means a point in which stable pressure within a piping system reduces in percentage by an amount relevant to a logical decision that water is in some way escaping a piping system (claim 1), benchmark means the stable pressure in a water piping system at the point in which a measurement of said pressure is taken and or any predetermination of stable pressure in time to allow for temperature and barometric pressure effects on stable water pressures over time (claim 1), installation means for performing of physical acts to place the device and the minimum described peripherals herein and or any additional peripherals also described herein into operation in a residential or business property and with operational limits which are established to match or meet the flow control values best determined at this time to optimize the operational functionality for said property (claim 1).

Information Disclosure Statement

4. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered (See pages 6-9 of the instant specification).

Drawings

- 5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Fig. 1, elements 1-25.
- 6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following features must be shown or the feature(s) canceled from the claim(s):

The Logic Based Electronic Controller for managing the flow of water through a piping system (claim 1); the supply being a main water supply line from either a utility or from a well head which communicates flow and pressure along piping to the residential or small business property (claim 1); a plurality of electrically actuated solenoid valves for flow control into the piping from the supply including a main shut off valve and a solenoid actuated valve for dividing the piping of independent usage at the property into two sections called the supply (and supply being all of the piping from the supply source to the point of entry into the property) and the structure piping (being all piping to include branches that are beyond the point of entry) (claim 1); a solenoid actuated valve for draining the piping, and a solenoid actuated valve for prevention of vacuum during the drain (claim 1); a water pressure sensor located both at the beginning of the supply and at the beginning of the structure piping (claim 1); a flow sensor being at the beginning of the structure piping (claim 1); all sensors being for the purpose of sending signal relating to their sensing meaning a pressure sensor delivers signal relative to current piping pressures and a flow sensor delivers signal relative to current flow within a piping system (claim 1); a thermal sensor communicating with controller to deliver signals relating to

Page 5

Art Unit: 2125

current temperature of water in hot water heater inline with said piping system (claim 1); a electrical relay being able to remove and or supply water heater with supply electrical current (claim 1); the solenoid actuated valve employed as the main valve for the RWMS system is a bi-positional valve that requires independent signals to place it in either the Open or Closed states (claim 1); a full and complete Water Management System developed into a single programmable electronic controller specifically designed to both aid in Water Conservation and provide full control and monitoring of all aspects of a plumbing system (claim 1) including Water Usage Counting (claim 1), Flow Control (claim 1), Leak Detection (claim 1), Programmable Modes (claim 1), Water Heater on/off (claim 1), hot water temperature (claim 1) and irrigation/sprinkler system(s) (claim 1); a device which allows the user to monitor, control, purge and adjust the entirety of a plumbing system (claim 1); a device which applies the principle . . . "increased pressure IS=decreased flow"..., therefore "stable pressure IS ALSO=absence of flow", to facilitate a completely accurate method of leak detection in plumbing (claim 1); a device which provides property damage prevention, reduced opportunity for toxic mold development, resulting in more healthy living environment(s) (claim 1); an Innovative Technologies Approach to Water Conservation and user friendly tool, to develop, monitor and participate in the urgent need to conserve drinking water resources (claim 1); flow control means controlling the flow of water through any piping beyond valves of control in response to pressure anomalies which trigger a counting of water until a user programmed amount in gallons has been reached (claim 1); device means Logic Based Electronic Controller in communications with all peripheral items which constitute a

Art Unit: 2125

method of control and usage monitoring for water piping systems (claim 1); pressure anomaly/anomalies means a point in which stable pressure within a piping system reduces in percentage by an amount relevant to a logical decision that water is in some way escaping a piping system (claim 1); benchmark means the stable pressure in a water piping system at the point in which a measurement of said pressure is taken and or any predetermination of stable pressure in time to allow for temperature and barometric pressure effects on stable water pressures over time (claim 1); water piping system(s) means any piping existing beyond a source of supply (claim 1); installation means the performing of physical acts to place the device and the minimum described peripherals herein and or any additional peripherals also described herein into operation in a residential or business property and with operational limits which are established to match or meet the flow control values best determined at this time to optimize the operational functionality for said property (claim 1); plumbing and or piping system means an interchangeable word or phrase which both have the same intended meaning and describe a system of conduit in which water flows from a source of that water to the intended usage point including peripheral items such as a water heater (claim 1); an On Mode (claim 6), Watch Mode (claims 7-8), Away Mode (claim 9), Purge Mode (claim 10), Locate Mode (claim 13), Water Counter Mode (claim 15), and Sleep Mode (claim 16) of operation.

No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures

Art Unit: 2125

appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The examiner has provided a number of examples of the drawing deficiencies above, however, the list of deficiencies may not be all inclusive. Applicant should refer to these as examples of deficiencies and should make all the necessary corrections to eliminate the drawing objections.

Specification

8. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Application/Control Number: 10/757,118 Page 8

Art Unit: 2125

9. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)

- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (i) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

10. Content of Specification

- (a) <u>Title of the Invention</u>: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) <u>Cross-References to Related Applications</u>: See 37 CFR 1.78 and MPEP § 201.11.

Application/Control Number: 10/757,118 Page 9

Art Unit: 2125

(c) <u>Statement Regarding Federally Sponsored Research and Development</u>: See MPEP § 310.

(d) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, <u>Reference to a "Microfiche Appendix</u>": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (e) <u>Background of the Invention</u>: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) <u>Field of the Invention</u>: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (g) <u>Brief Description of the Several Views of the Drawing(s)</u>: See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.

Application/Control Number: 10/757,118 Page 10

Art Unit: 2125

(h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (k) <u>Sequence Listing</u>, See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.
- 11. The use of the trademark "Innovative Technologies" has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

- 12. The claims are objected to because of the following informalities: Referring to claim 1, line 27, the examiner respectfully submits that "entirety" should be rephrased entirety.

 Appropriate correction is required.
- 13. Claims 3-4, 12, are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims 3-4, 12 not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. Claim 1 recites the limitation "the supply" in line 2. Claim 1 recites the limitation "the residential or small business property" in lines 3-4. Claim 1 recites the limitation "the piping" in line 5. Claim 1 recites the limitation "the piping of independent usage" in line 6. Claim 1 recites the limitation "the property" in line 6. Claim 1 recites the limitation "the supply source" in line 7. Claim 1 recites the limitation "the point of entry" in line 7. Claim 1 recites the limitation "the structure piping" in line 8. Claim 1 recites the limitation "the drain" in line 10. Claim 1 recites the limitation "the beginning of the supply" in line 11. Claim 1 recites the limitation "the beginning of the structure piping" in lines 11-12. Claim 1 recites the limitation "the main valve" in line 18. Claim 1 recites the limitation "the RWMS system" in line 18. Claim 1 recites the

limitation "the Open or Closed states" in line 19. Claim 1 recites the limitation "the user" in line 26. Claim 1 recites the limitation "the entirety of a plumbing system" in line 27. Claim 1 recites the limitation "the stable pressure" in page 2. Claim 1 recites the limitation "the point in which a measurement of said pressure is taken" in page 2. Claim 1 recites the limitation "the minimum described peripherals" in page 2. Claim 1 recites the limitation "flow control values" in page 3. Claim 1 recites the limitation "the operational functionality" in page 3. Claim 1 recites the limitation "the intended usage point" in page 3.

There is insufficient antecedent basis for these limitations in the claim(s).

- 15. Referring to claim 1, lines 7-9, it is not clear if the structure described inside the parenthesis are intended to be required limitations. For purposes of examination, it will be assumed that the structure described inside the parenthesis is intended to be required limitations.
- 16. Referring to claim 1, lines 19-20, it is not clear if the phrase "being best described as" requires the claim limitations that follow. For purposes of examination, it will be assumed that the phrase "being best described as" requires all claim limitations that follow.
- 17. Referring to claim 1, lines 12-15 "all sensors being...within the piping" is unclear.
- 6. Referring to claim 1, lines 15-16, it is unclear what is "inline with said piping system".
- 18. The term "small" in claim 1 is a relative term which renders the claim indefinite. The term "small" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The size of the business property has been rendered indefinite by the use of the term small.

Art Unit: 2125

Page 13

- 19. The term "Innovative Technologies" in claim 1 is a relative term which renders the claim indefinite. The term "Innovative Technologies" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The approach to water conservation has been rendered indefinite by the use of the term Innovative Technologies.
- 20. Claim 1, line 35 requires the limitation of "said Controller", however, claim 1 recites the limitation of a logic based electronic controller in line 1 and a controller in line 16, therefore, it is not clear which controller is "said Controller".
- 21. Claim 1, page 2, last line requires the limitation of "the device", however, claim 1 recites the limitations of many devices, therefore it is not clear which device is "the device".
- 22. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.
- 23. Claims 1-27 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph. The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.
- 24. Claims in which both an apparatus and the method steps of using the apparatus is indefinite under 35 USC 112, second paragraph. This type of claim is indefinite because it fails to positively recite the boundaries sought for protection. The metes and bounds of the claim

cannot be determined because it is unclear as to which category of subject matter is sought for protection, i.e., the method or the apparatus.

- 25. Due to the number of 35 USC § 112 rejections, the examiner has provided a number of examples of the claim deficiencies in the above rejections, however, the list of rejections may not be all inclusive. Applicant should refer to these rejections as examples of deficiencies and should make all the necessary corrections to eliminate the 35 USC § 112 problems and place the claims in proper format.
- 26. Due to the vagueness and a lack of clear definition of the terminology and phrases used in the specification and claims, the claims have been treated on their merits as best understood by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 27. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's Admitted Prior Art (hereinafter referred to as AAPA).

AAPA teaches product similar to that of the instant invention (See page 6, second paragraph – page 8, first paragraph). AAPA also teaches that the design to produce the sum total of the operational characteristics of the RWMS, which is the subject of the patent application, in a single logic based electronic controller device is inherent (See page 11, first paragraph of the instant specification). Applicant teaches the inherency of the invention applies to the

professional knowledge, training and technological application which is standard to electronic development engineers in the United States and worldwide, which the examiner believes is easily interpreted to mean of common knowledge or commonly known in the art.

The examiner respectfully submits that claims 1-7 and 9-27, as such, do not require any detection of small leaks (See page 6, paragraph 2 of the instant specification). The examiner respectfully submits that the claims, as such, do not require any "Do-It-Yourself installation" (See page 6, paragraph 2 of the instant specification). The examiner respectfully submits that the claims, as such, do not require any installation that places controls for the system inside the actual dwelling or business property (See page 7 of the instant specification). The examiner respectfully submits that claims 1-14 and 16-27, as such, do not require a water counter mode. The claims, as such, do not require any specification direct devices or digitally recorded total usage amounts.

Conclusion

28. The prior art or art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents or publications are cited to further show the state of the art with respect to leak detection.

U.S. Pat. No. 3,952,759 to Ottenstein.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571) 272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

Art Unit: 2125

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SPS

Sean P. Shechtman

November 14, 2004

LEO PICARD SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100

L-P.P.